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EXAMINER	
VAN HANDEL, MICHAEL P	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/844,005	PARK ET AL.	
	Examiner	Art Unit	
	Michael Van Handel	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-4,6,7,9 is/are rejected.

7)☒ Claim(s) 5 and 8 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The use of the trademarks Viaccess, Conax, Cryptwork, Irdeto, and Nagravision has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Allowable Subject Matter

2. Claims 5, 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

4. Claim 2 contains the trademark/trade names Viaccess, Conax, Cryptwork, Irdeto, and Nagravision. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The

claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe scrambling methods and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lloyd.

Referring to claim 1, Lloyd discloses a satellite broadcasting receiver 701 (p. 6, l. 5-7, 29-32)(p. 7, l. 30-32)(p. 15, l. 1-3)(Figs. 1, 2, 4) for receiving scrambled or unscrambled digital satellite broadcasting signals 11 (p. 3, l. 31-37)(p. 4, l. 1)(p. 8, l. 20-27)(p. 13, l. 1-11, 17-29)(Figs. 2-4), demultiplexing the signals (p. 8, l. 21-28)(Figs. 1-3), decoding the signals and outputting audio and video signals (p. 8, l. 28-30)(p. 27, l. 27-31, 35-37)(p. 28, l. 1-3)(Figs. 2-4), a multichannel signal receiver 701 (p. 2, l. 33-35) comprising:

- a descrambler including a plurality of descrambling units for descrambling the scrambled digital satellite broadcasting signals (p. 4, l. 15-22)(p. 28, l. 30-37)(p. 29, l. 1)(Figs. 2, 3);
- signal receiver 708 (channel decoder) for receiving at a least one digital satellite broadcasting signal via at least one antenna (the examiner notes that an antenna for receiving satellite broadcasting signals is inherent to the functionality of a satellite broadcasting reception system), and outputting the digital satellite broadcasting signal (p. 27, l. 35-37)(p. 28, l. 1)(Fig. 4);
- a signal output unit 10, 702 (programmable transport interface (PTI) and MPEG-2 decoder) for demultiplexing the digital satellite broadcasting signal (p. 8, l. 21-28)(Figs. 2, 3), demodulating the signal, and outputting audio and video signals (p. 8, l. 21-30)(p. 27, l. 27-31)(Figs. 2-4);
- a common interface controller 10 (programmable transport interface (PTI)) for checking whether the digital satellite broadcasting signal provided by the signal receiver is a paid signal or a free signal (the examiner notes that in television broadcasting a paid signal relates to a scrambled signal and a free signal relates to an unscrambled signal), outputting the digital satellite broadcasting signal to the signal output unit when the digital satellite broadcasting signal is a free signal, and outputting the digital satellite broadcasting signal to the descrambler and outputting a descrambled digital satellite broadcasting signal to the signal output unit when the digital satellite broadcasting signal is a paid signal (p. 3, l. 31-37)(p. 4, l. 1)(p. 13, l. 1-11, 17-29)(Figs. 2, 3); and

- a host central processing unit 700 (CPU) for controlling the signal receiver, the common interface controller and the signal output unit (p.9, l. 29-31)(p.29, l. 23-25)(Figs. 2, 3).

5. Claims 1, 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaney.

Referring to claim 1, Chaney discloses a satellite broadcasting receiver (video signal processing system)(col. 3, l. 53-60)(Figs. 1, 12) for receiving scrambled or unscrambled digital satellite broadcasting signals (col. 8, l. 58-65), demultiplexing the signals (col. 5, l. 61-63)(Fig. 1), decoding the signals and outputting audio and video signals (col. 6, l. 17-34)(Fig. 1), a multichannel signal receiver (col. 12, l. 28-51)(Figs. 9-12) comprising:

- a descrambler 180, 1805 including a plurality of descrambling units for descrambling the scrambled digital satellite broadcasting signals (col. 12, l. 28-52)(Figs. 9-12);
- a signal receiver (Figs. 1, 12) for receiving at least one digital satellite broadcasting signal via at least one antenna (the examiner notes that an antenna for receiving satellite broadcasting signals is inherent to the functionality of a satellite broadcasting reception system), and outputting the digital satellite broadcasting signal (col. 16, l. 9-37)(Figs. 11, 12);
- a signal output unit (demux, decompressors, signal processors) 130, 140, 145, 150, 155 for demultiplexing the digital satellite broadcasting signal (col. 5, l. 61-63)(Fig. 1), demodulating the signal, and outputting audio and video signals (col. 6, l. 17-34)(Fig. 1);
- a common interface controller 183 (security controller) for checking whether the digital satellite broadcasting signal provided by the signal receiver is a paid signal or

a free signal, outputting the digital satellite broadcasting signal to the signal output unit when the digital satellite broadcasting signal is a free signal (the examiner notes that in television broadcasting a paid signal relates to a scrambled signal and a free signal relates to an unscrambled signal), and outputting the digital satellite broadcasting signal to the descrambler and outputting a descrambled digital satellite broadcasting signal to the signal output unit when the digital satellite broadcasting signal is a paid signal (col. 8, l. 58-65)(Figs. 1, 4); and

- a host central processing unit (CPU) 160 (microcontroller) for controlling the signal receiver (col. 4, l. 33-40), the common interface controller (col. 5, l. 58-60)(col. 6, l. 8-13, 59-62)(col. 9, l. 17-36)(col. 10, l. 10-26)(col. 12, l. 17-27) and the signal output unit (col. 15, l. 43-47)(Figs. 1, 11, 12).

Referring to claim 3, Chaney discloses the receiver of claim 1, wherein the descrambling process is performed by a common interface module (col. 8, l. 58-66)(Fig. 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of Christine et al.

Referring to claim 4, Lloyd discloses a receiver 701 with a common interface controller 10 (programmable transport interface (PTI)), comprising:

- a transport stream interface 100, 200 (input interface and transport controller) for receiving at least one digital satellite broadcasting signal from the signal receiver (p. 7, l. 30-32)(Figs. 2-4), checking whether the digital satellite broadcasting signal is a paid broadcasting signal (p. 13, l. 1-11)(Figs. 2-4), supplying the checked paid broadcasting signal to the descrambler, controlling the descrambling process (p. 13, l. 4-8, 20-28)(Figs. 2-3), and outputting the descrambled broadcasting signal provided by the descrambler to the signal output unit (p. 7, l. 25-30)(p. 8, l. 21-30)(Figs. 2-4);
- a host interface 200 (transport controller) for controlling at least one common interface module of the descrambler according to the control of the host CPU (p. 9, l. 15-21, 29-36)(Figs. 2-4).

Lloyd does not disclose that the common interface controller 124 comprise an inter integrated circuit (I^2C) interface for controlling the host interface and the transport stream interface according to the control of the host CPU. Christine et al. discloses the use of a Phillips Inter-Integrated-Circuit Control (I^2C) interface that is dedicated to the transmission and reception of command, status messages and video data between a host and a video decoder (col. 4, l. 24-38)(Fig. 1). It would have been obvious to modify Lloyd to include an I^2C interface such as that taught by Christine et al. in order to provide an interface and communication protocol for allowing a host to control and communicate with other receiver components (col. 2, l. 1-5).

6. Claims 6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of Cowe.

Referring to claim 6, Lloyd discloses a satellite broadcasting signal receiving method (p. 6, l. 5-7, 29-32)(p. 7, l. 30-32)(p. 15, l. 1-3)(Figs. 1, 2, 4) for receiving scrambled or unscrambled digital satellite broadcasting signals (p. 3, l. 31-37)(p. 4, l. 1)(p. 8, l. 20-27)(p. 13, l. 1-11, 17-29)(Figs. 2-4), demultiplexing the signals (p. 8, l. 21-28)(Figs. 1-3), decoding the signals and outputting audio and video signals (p. 8, l. 28-30)(p. 27, l. 27-31, 35-37)(p. 28, l. 1-3)(Figs. 2-4), with a method for controlling a multichannel signal receiver (p. 2, l. 33-35) comprising:

- selecting at least one receiving channel of the digital satellite broadcasting signals according to a driving of the receiver (p. 2, l. 33-37)(p. 3, l. 1)(p. 7, l. 6-14)(Fig. 1);
- checking whether the broadcasting signal is a paid signal when the broadcasting signal is received (p. 3, l. 31-37)(p. 4, l. 1);
- demultiplexing the corresponding broadcasting signal, decoding the signal and outputting the signal when the received broadcasting signal is that of a free broadcast (the examiner notes that in television broadcasting a free signal relates to an unscrambled signal)(p. 3, 31-37)(p. 4, l. 1)(p. 6, l. 33-35)(p. 7, l. 6-14)(p. 13, l. 1-11, 17-29)(Figs. 2, 3); and
- descrambling the corresponding broadcasting signal, demultiplexing the descrambled broadcasting signal and decoding the same when the received broadcasting signal is that of a paid broadcast (the examiner notes that in television broadcasting a paid signal relates to a scrambled signal)(p. 8, l. 21-28)(Figs. 1, 2).

Lloyd does not disclose that the method comprise checking a receipt state of a broadcasting signal of the selected broadcasting signals, and outputting a warning message that no signal is received when the broadcasting signal is not received. Cowe discloses the method of sensing the

presence of a video carrier signal on any one or more channels. If a microprocessor reports that no signal is present, a substitute default video text message can be automatically inserted stating "Please Stand By. Normal programming will resume as soon as possible." It would have been obvious to anyone of ordinary skill in the art at the time that the invention was made to modify Lloyd to include a method of sensing the loss of a video carrier signal and outputting a corresponding message to the user such as that taught by Cowe in order to alert the user of a television system problem.

Referring to claim 9, Lloyd discloses a method in which the descrambled broadcasting signals are demultiplexed, decoded and output via respective different paths when at least two descrambled broadcasting signals are provided (p. 3, l. 10-16).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney in view of Cowe.

Referring to claim 6, Chaney discloses a satellite broadcasting signal receiving method (video signal processing method)(col. 3, l. 53-60)(Figs. 1, 12) for receiving scrambled or unscrambled digital satellite broadcasting signals (col. 8, l. 58-65), demultiplexing the signals (col. 5, l. 61-63)(Fig. 1), decoding the signals and outputting audio and video signals (col. 6, l. 17-34)(Fig. 1), with a method for controlling a multichannel signal receiver (col. 12, l. 28-51)(Figs. 9-12) comprising:

- selecting at least one receiving channel of the digital satellite broadcasting signals according to a driving of the receiver (col. 4, l. 33-40)(Fig. 1);
- checking whether the broadcasting signal is a paid signal when the broadcasting signal is received (col. 8, l. 58-65)(Figs. 1, 4);

- demultiplexing the corresponding broadcasting signal, decoding the signal and outputting the signal when the received broadcasting signal is that of a free broadcast (the examiner notes that in television broadcasting a free signal relates to an unscrambled signal)(col. 6, l. 17-34)(col. 8, l. 58-65)(col. 15, l. 43-47)(Figs. 1, 11); and
- descrambling the corresponding broadcasting signal, demultiplexing the descrambled broadcasting signal and decoding the same when the received broadcasting signal is that of a paid broadcast (the examiner notes that in television broadcasting a paid signal relates to a scrambled signal)(col. 5, l. 58-63)(col. 6, l. 17-34)(col. 8, l. 9-12)(Figs. 1, 4).

Chaney does not disclose that the method comprise checking a receipt state of a broadcasting signal of the selected broadcasting signals, and outputting a warning message that no signal is received when the broadcasting signal is not received. Cowe discloses the method of sensing the presence of a video carrier signal on any one or more channels. If a microprocessor reports that no signal is present, a substitute default video text message can be automatically inserted stating "Please Stand By. Normal programming will resume as soon as possible." It would have been obvious to anyone of ordinary skill in the art at the time that the invention was made to modify Chaney to include a method of sensing the loss of a video carrier signal and outputting a corresponding message to the user such as that taught by Cowe in order to alert the user of a television system problem.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney in view of Furuya et al.

Referring to clam 7, Chaney discloses a method of descrambling, demultiplexing, and decoding a received paid broadcasting signal)(col. 5, l. 58-63)(col. 6, l. 17-34)(col. 8, l. 9-12)(Figs. 1, 4) comprising:

- checking whether a descrambler for descrambling the scrambled broadcasting signal is provided (col. 12, l. 58-65)(col. 13, l. 32-46)(col. 14, l. 2-10)(Fig. 9);
- descrambling the broadcasting signal, demultiplexing the signal, demodulating the signal and outputting the signal when the descrambler is provided (col. 5, l. 58-63)(col. 6, l. 17-34)(col. 8, l. 9-12)(col. 13, l. 44-46)(Figs. 1, 4); and

Chaney does not disclose displaying a message that no smart card for descrambling the broadcasting signal is provided when the descrambler is not provided in. Furuya et al. discloses a method for displaying a message, typically stating: "Insert a card" on a screen when an IC card has not been mounted on the card-reader employed in the IRD (col. 10, l. 30-34)(Figs. 3A, 10). It would have been obvious to anyone of ordinary skill in the art at the time that the invention was made to modify Chaney to include a method of displaying a missing card notification such as that taught by Furuya et al. in order to alert the user of a missing security module.

VIVEK SRIVASTAVA
PRIMARY EXAMINER